

**STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE ENVIRONMENTAL QUALITY BOARD**

In the Matter of the Application of
Faribault Energy Park, LLC, for a Site
Permit For a Combined Cycle Natural Gas
Fired Combustion Turbine Project in Rice
Minnesota

**FINDINGS OF FACT,
CONCLUSIONS AND
RECOMMENDATION** County,

The above entitled matter came on for hearing before Administrative Law Judge Beverly Jones Heydinger at 2:00 p.m. and 7:00 p.m. on April 12, 2004, at the Faribault City Hall, Faribault, Minnesota.

Appearances: James D. Larson, 200 South 6th Street, Suite 300, Minneapolis, Minnesota 55402, Vice President of Faribault Energy Park, LLC, appeared on behalf of the applicant, Faribault Energy Park, LLC ("Applicant" or "FEP"). Alan Mitchell and William Storm, 300 Centennial Building, 658 Cedar Street, St. Paul, Minnesota 55155, represented the Minnesota Environmental Quality Board ("MEQB") Staff.

The MEQB Staff filed the Environmental Impact Statement Comments and Responses on April 12, 2004. On that date, the record closed.^[1]

Notice is hereby given that pursuant to Minnesota Statutes § 14.61 and Minn. Rule 4405.0900, exceptions to this report, if any, by any party adversely affected must be filed within ten (10) days of the mailing date hereof with the Director of the Minnesota Environmental Quality Board, 658 Cedar Street, St. Paul, Minnesota 55155. Exceptions must be specific and stated and numbered separately. Proposed Findings of Fact, Conclusions and Order should be included, and copies served upon all parties.

Further notice is hereby given that the MEQB may, at its own discretion, accept or reject the Administrative Law Judge's Recommendation and that the Recommendation has no legal effect unless expressly adopted by the Board as its final Order.

The MEQB will make the final determination of the matter after the expiration of the period for filing exceptions as set forth above or after oral argument if such is requested and granted in this matter.

If the Board fails to issue a final decision within 90 days of the close of the record, this report will constitute the final agency decision under Minn. Stat. § 14.62,

subd. 2a. The record closes upon the filing of exceptions to the report and the presentation of argument to the Board, or upon the expiration of the deadline for doing so. The Board must notify the parties and the Administrative Law Judge of the date on which the record closes.

STATEMENT OF ISSUE

Should the MEQB issue a Site Permit to Faribault Energy Park for a large electric power generating plant, and if so, for which of the sites under consideration?

Based upon all the proceedings herein, the Administrative Law Judge makes the following:

FINDINGS OF FACT

A. Procedural History and the Parties

1. The Applicant, FEP, is a limited liability corporation wholly owned by the Minnesota Municipal Power Agency ("MMPA"). FEP intends to operate Faribault Energy Park ("the Plant") as an intermediate load facility that sells power at wholesale to MMPA member municipal utilities.^[2]

2. On September 9, 2003, FEP filed an application for a Site Permit to the MEQB to construct and operate a 250 megawatt (MW) combined cycle large electric power generating plant proposed to be located in the City of Faribault, Rice County, Minnesota.^[3]

3. On September 18, 2003, the MEQB accepted the FEP application for the project and began the review process, and decided not to appoint a citizen advisory task force for the project due to the anticipated non-controversial nature of the proposed project.^[4]

4. The MEQB conducted a public information meeting in Faribault on October 15, 2003, on the proposed Plant. The meeting was held at 2:00 p.m. and 7:00 p.m. in the Faribault City Hall Public Meeting Room pursuant to published and mailed notices.^[5]

5. The MEQB issued an Environmental Impact Statement ("EIS") Scoping Document for the proposed Plant on October 13, 2003. The MEQB made no additional site proposals. The MEQB identified specific topics to be included in the scope of the EIS.^[6]

6. The MEQB issued a Scoping Order for the EIS on the FEP application for a site permit on October 29, 2003. The Scoping Order stated the EIS should address only the Preferred Plant Site and the Alternative Plant Site put forward for consideration by the Applicant.^[7]

7. Notice of the Public Hearing on the application by FEP for a Site Permit for the Plant was published on the dates shown below.

March 15, 2004 MEQB Monitor^[8]

April 2, 2004 Faribault Daily News^[9]

8. Notice of the Availability of the Draft EIS for the Plant, Public Meeting about the Draft EIS, and opportunity to comment was published on the dates shown below.

March 1, 2004 MEQB Monitor^[10]

March 12, 2004 Faribault Daily News^[11]

9. On July 10, 2003, the Minnesota Public Utilities Commission (“MPUC”) granted a Certificate of Need for the proposed project. The Order Granting Certificate of Need was issued on August 13, 2003.^[12]

10. Notice of the EIS Scoping Decision, Notice of Public Hearings and Public Information Meetings on the application for the Site Permit for the Plant, Notice of Draft EIS Availability, and Draft EIS were mailed to various government officials, persons on the MEQB project contact list, members of the MEQB, and various libraries or government offices as required by statute and rule.^[13]

11. Notice of submission of FEP’s Site Permit Application was mailed to persons on the general list maintained by the MEQB, local governmental units, and adjacent property owners on the 22nd, 23rd, and 24th of September 2003.^[14]

12. On March 29, 2004, a copy of the prefiled direct testimony of Randall W. Porter and Michael J. Donnelly was filed with the Administrative Law Judge and served upon the MEQB, each party, and the MPUC Service List. A copy of the testimony was also sent to the Faribault City Administrator to make the testimony available to the public at the Faribault City Offices.^[15]

13. Pursuant to published notice, a hearing was held on April 12, 2004 at 2:00 p.m. and 7:00 p.m., City Council Chambers, 208 1st Avenue, Faribault, Mn. Representatives of FEP and the EQB attended and were available to respond to questions. The witnesses who submitted pre-filed testimony were available for cross-examination. No member of the public chose to comment on the proposed site permit. One question was asked concerning the timing of construction.

B. General Description of the Plant And The Proposed Location

14. The Minnesota Municipal Power Agency (“MMPA”) is a power agency organized under Minn. Stat. Ch. 453 to provide electrical energy and related services to

its members and customers. MMPA's members are the cities of Anoka, Arlington, Brownton, Chaska, Le Sueur, North St. Paul, Olivia, and Winthrop.^[16]

15. The MMPA is the sole owner of Faribault Energy Park, LLC, created for the purpose of developing Faribault Energy Park.^[17]

16. FEP and the MMPA propose to build, own and operate an electric generating facility to be known as Faribault Energy Park. The Plant is designed as a "one-on-one" type of multi-shaft combined cycle power plant, with one gas turbine/generator and one steam turbine/generator. Each turbine drives an electrical generator to produce electricity. One combustion turbine will operate in combined cycle with a heat recovery steam generator ("HRSG"). Operating in combined cycle the Plant will produce a nominal 250 MW. The Plant will include a 170-foot exhaust stack with continuous emissions monitoring, a cooling tower, a natural gas fired auxiliary boiler, 115 kilovolt ("kV") generator step-up transformers, a 115 kV substation, a one million gallon raw water storage tank, a 250,000 gallon demineralized water tank, an ammonia unloading and storage facility for aqueous ammonia, two 350,000 gallon fuel oil storage tanks, a steam turbine building, control and electrical rooms, a public meeting/observation room, a 500 kilowatt ("kW") emergency generator, a fire protection system, a waste water collection system, and a storm water collection system.^[18]

17. The Plant is proposed to be located in the City of Faribault, about 2.5 miles north of the downtown area on the west side of Highway 76, south of 170th Street West and east of Interstate 35. FEP has proposed two sites that are in close proximity to the intersection of the Northern Natural Gas ("NNG") high pressure natural gas mainline and the Northern States Power Company ("NSP") Lake Marion – West Faribault 115 kV high voltage transmission line ("HVTL"). The NNG mainline consists of five pipes ranging from 16 to 30 inches in diameter, sufficient to serve the maximum needs of the Plant (summertime, hot weather operation). The Plant will have an interruptible natural gas supply. The Lake Marion – West Faribault 115 kV HVTL will provide the outlet for the electrical energy generated at the Plant. The proximity to this intersection is a key feature of the project, because it takes advantage of a location that is optimal, both electrically and geographically, and avoids the need for constructing long transmission line and gas pipeline interconnections.^[19]

18. The purpose of the project is to meet MMPA's load growth by providing intermediate load and peak load capacity for anticipated capacity shortages. Construction is expected to be completed by the second quarter of 2006, and has a thirty year life.^[20]

19. FEP has proposed a "Preferred Plant Site" and an "Alternative Plant Site." The general location of the sites in relation to Rice County, Interstate 35 and Highway 76 is shown in Figures 1, 2 and 3 of the EIS.^[21] Both sites are located in the City of Faribault, in Rice County.^[22] The Preferred Plant Site is located in the SW ¼ of the NE ¼ of Section 13, Township 110N, Range 21W. The Alternative Plant Site is located

adjacent to and east of the Preferred Plant Site in the SE ¼ of the NE ¼ of Section 13, Township 110N, Range 21W. ^[23]

20. The Plant is designed as an intermediate load plant, to sell capacity and energy to the MMPA member municipal utilities. The actual usage (availability) of the Plant, measured as its annual capacity factor, is expected to be 40 to 80 percent, based upon MMPA's predicted intermediate resource needs. It is expected that the Plant will typically run at a capacity factor of about 50 percent. ^[24]

21. The proposed project attempts to maximize the benefits to regional and local area transmission while minimizing the construction of new transmission facilities. When the project is completed, the Plant will be a significant new generation source in close proximity to major loads such as the Twin Cities metro area, Rochester, and the cities of south central Minnesota. The Plant will improve energy supply reliability to these areas during outages of generation or transmission or during disturbance conditions such as those that occurred due to the June 25, 1998, storms. Interconnection studies were conducted by the Midwest Independent System Operator ("MISO") as part of the interconnection process. The project will improve some of the transmission constraints, or bottlenecks, which currently impede regional and inter-regional transactions. ^[25]

C. Detailed Description Of The Plant and Associated Facilities

22. The Plant utilizes the same technology at both the Preferred and Alternative Plant Sites. FEP expects the following equipment to be required: ^[26]

- A Combustion Turbine Generator ("CTG") set consisting of a dual fuel dry low NOx combustion technology gas turbine driving a hydrogen-cooled or totally enclosed water-to-air cooled generator. The Turbine will produce a nominal 250 MW.
- A three-pressure Heat Recovery Steam Generator with a Selective Catalytic Reduction ("SCR") system
- A Steam Turbine Generator ("STG") consisting of a dual admission, reheat steam turbine and a hydrogen cooled or totally enclosed water-to-air cooled generator
- Two condensate pumps and two main circulating cooling water pumps
- A 3.41 million gallon per hour Cooling Tower
- An Auxiliary Boiler with a burner capacity of 40 million Btu's per hour, natural gas fired
- Main 115 kV step up transformers for each CTG and STG

- A steam turbine building, which will also house the warehouse and workshop area, control and electrical rooms, a public meeting/observation room, and kitchen facilities
- A stack continuous emissions monitoring system
- An ammonia unloading and storage facility for aqueous ammonia, with pumps and piping for forwarding to the SCR ammonia vaporization skid
- A 115 kV substation will connect to the 115 kV Lake Marion - West Faribault HVTL
- A 170 foot exhaust stack
- A 250,000-gallon demineralized water storage tank
- Two 350,000-gallon fuel oil tanks
- A water storage tank with a capacity of approximately 1,000,000 gallons
- A 500 kW Emergency Generator, fuel oil fired
- A fire protection system, including a 250 horsepower ("hp") Fire Pump Engine
- A wastewater collection system
- A storm water collection system

D. Natural Gas Pipeline Interconnection

23. Natural gas will be delivered to the Plant via the NNG system in southern Minnesota. The NNG mainline consists of five pipes ranging from 16 to 30 inches in diameter. Interconnection of the Plant to the NNG natural gas mainline will be by one quarter mile of 10-inch line (anticipated to operate in the range of 400 pounds per square inch). The line will be routed to the Preferred Plant Site on FEP land, or if the Alternative Plant Site is selected, by private easement. The new 10-inch line is the subject of a separate pipeline routing process now pending before the MEQB.^[27]

24. Mid-Continent Area Power Pool accreditation requires the Plant to be capable of uninterrupted operation during periods when natural gas is curtailed or interrupted. For backup fuel, distillate fuel oil will be delivered to the Plant by truck and stored in two 350,000 gallon on-site storage tanks. The sulfur content of the distillate fuel oil will not exceed .05% by weight.^[28]

25. The Preferred Plant Site would require significantly less construction of gas line to access the NNG mainline, resulting in about a \$1.1 million reduction in gas line costs. The proposed route of the pipeline for the Preferred Plant Site is shown in Figure 3 of Section 2 of the Site Permit Application, and the proposed route of the pipeline for the Alternative Plant Site is shown in Figure 4 of Section 2 of the Site Permit Application.^[29]

E. Transmission Interconnection

26. Interconnection of the Plant to the Lake Marion – West Faribault 115 kV transmission line requires a 115 kV Tap Line. If the Plant were located on the Preferred Plant Site, the entire routing of the line would be on the Preferred Plant Site. The Preferred Plant Site would require less distance of construction for the electrical interconnect than the Alternative Plant Site. The cost difference could be as much as \$125,000. If the Plant were located on the Alternative Plant Site, a transmission easement over the Preferred Plant Site would be required. The easement would idle land subject to the easement from potential development.^[30] The two new circuits of the 115 kV tap line are the subject of a separate transmission line routing process now pending before the MEQB.^[31]

F. Raw Water Supply

27. The major sources of raw water demands of the power plant are chilled water cooling and fire protection. The use requiring the greatest consumptive demand – approximately 1350 gallons per minute maximum instantaneous demand – will be chilled water cooling for power generation purposes. The maximum water rate will occur only when the turbine is operating at maximum output in the combined cycle mode. A very small amount of water will be used for specialized uses in the generation process. Some water will be used in an evaporative cooling process. Sufficient reserve capacity will be maintained for fire protection purposes. Water uses are shown in Appendix A, Table A-14 of the Site Permit Application.^[32]

28. Groundwater will be stored in a water storage tank with capacity of approximately 1,000,000 gallons. Demineralized water used for steam cycle makeup, power augmentation, and various other purposes will be stored in a 250,000 gallon water storage tank.^[33]

29. Water will be extracted from the Jordan aquifer. Based on the available data on the aquifers located at the Preferred Plant Site, the Jordan aquifer is expected to have the ability to provide the required water resources for the Plant. Preliminary discussions with the Minnesota Department of Natural Resources (“MDNR”) appear to suggest that the proposed pumping rate and water usage anticipated by the operation of the proposed Plant should not have an adverse impact on water supplies. However, a final determination cannot be made until the groundwater appropriations permit has been submitted to and reviewed by the MDNR.^[34]

30. The Jordan Sandstone is open and porous throughout Rice County. The formation is approximately 90 feet thick. It is saturated with water under sufficient pressure to enter wells freely and to flow to the surface under considerable head in the valleys of the Cannon and Straight Rivers. A groundwater appropriation permit will be required from the MDNR and a well installation permit will be required from the Minnesota Department of Health.^[35]

31. A search to identify wells on or in the vicinity of the proposed project site using the County Well Index database was conducted. There are no recorded wells on the Preferred Plant Site. Several wells, ranging in depth from 100 feet below grade to 440 feet below grade, exist within one mile of the proposed project site. Preliminary calculations indicate the Plant's use of water would not result in interference with nearby groundwater use, confirmed by consultation with the MDNR.^[36]

32. The water resources at the Alternative Plant Site are the same as those of the Preferred Plant Site.^[37]

G. Generation And Treatment of Wastewater

33. Because City sanitary sewer is not yet available at the project site, sanitary wastewater will be directed to an onsite septic system permitted in accordance with applicable Rice County requirements. Total estimated flow is approximately 3,500 gallons per day ("gpd"). Process wastewater is estimated at approximately 0.5 million gallons per day ("mgd"), composed of facility drain waters, cooling tower blowdown, and other operational wastewater. Process wastewater will be discharged to a created wetland at the Preferred Plant Site pursuant to a National Pollutant Discharge Elimination System ("NPDES") permit issued by the Minnesota Pollution Control Agency ("MPCA"). The Alternative Plant Site would not accommodate a created wetland, so wastewater would be treated and discharged into the unnamed tributary of the Cannon River under applicable permit. At either site, FEP will be required to follow an MPCA issued storm water management plan that meets applicable standards.^[38]

H. Environmental And Socioeconomic Impacts

Applicable Statutory and Rule Considerations

34. Minn. Stat. § 116C.57, subd. 4, provides that the MEQB shall be guided by the following responsibilities, procedures, and considerations:

- a) Evaluation of research and investigations relating to the effects on land, water and air resources of large electric power generating plants and high voltage transmission lines and the effects of water and air discharges and electric and magnetic fields resulting from such facilities on public health and welfare, vegetation, animals, materials and aesthetic values, including baseline studies, predictive modeling, and evaluation of

new or improved methods for minimizing adverse impacts of water and air discharges and other matters pertaining to the effects of power plants on the water and air environment;

b) Environmental evaluation of sites and routes proposed for future development and expansion and their relationship to the land, water, air and human resources of the state;

c) Evaluation of the effects of new electric power generation and transmission technologies and systems related to power plants designed to minimize adverse environmental effects;

d) Evaluation of the potential for beneficial uses of waste energy from proposed large electric power generating plants;

e) Analysis of the direct and indirect economic impact of proposed sites and routes including, but not limited to, productive agricultural land lost or impaired;

f) Evaluation of adverse direct and indirect environmental effects that cannot be avoided should the proposed site and route be accepted;

g) Evaluation of alternatives to the applicant's proposed site or route proposed pursuant to subdivisions 1 . . . ;

h) Evaluation of potential routes that would use or parallel existing railroad and highway rights-of-way;

i) Evaluation of governmental survey lines and other natural division lines of agricultural land so as to minimize interference with agricultural operations;

j) Evaluation of the future needs for additional high voltage transmission lines in the same general area as any proposed route, and the advisability of ordering the construction of structures capable of expansion in transmission capacity through multiple circuiting or design modifications;

k) Evaluation of irreversible and irretrievable commitments of resources should the proposed site or route be approved;

l) When appropriate, consideration of problems raised by other state and federal agencies and local entities;

m) If the board's rules are substantially similar to existing regulations of a federal agency to which the utility in the state is subject, the federal regulations must be applied by the board;

n) No site or route shall be designated which violates state agency rules.

The application and the Environmental Impact Statement contain adequate information to allow the MEQB to consider these factors.

Site Considerations

35. Minn. Rule 4400.3050 requires that the MEQB be guided by specified siting considerations. Each specific consideration will be assessed in the following Findings.

Effects on Human Settlement

36. Minn. Rule 4400.3150 requires that the MEQB must consider effects on human settlement, including, but not limited to, displacement, noise, aesthetics, cultural values, recreation, and public services. The Preferred Plant Site is superior with respect to these elements.

Human Settlement

37. In general, the effects on human settlement are limited. The construction of the project on the Preferred Plant Site would not displace any persons. The closest residence is on a parcel about 800 feet east of the Preferred Plant Site. Should the Alternative Plant Site be selected, a nearby landowner may want to sell, and one family unit could be displaced. The project should have no effect on housing as the Preferred Plant Site is already zoned for an industrial use and the Alternative Plant Site is zoned Transitional Urban Development, which is a holding zoning designation for annexed property that does not yet have a formalized development plan with the City.^[39]

38. According to information from the 2000 Census, there is not a significant percent of low-income, Native American, or minority persons within the Project area. There will be no disproportionately high or adverse effects on these populations.^[40]

Aesthetics

39. The dominant visual features of the proposed project site include agricultural lands, sparse woodlands, wetlands and drainage-ways. The potential project area is located in an undeveloped area of Faribault, and the visual features of the surrounding area include farmsteads, transmission lines, Interstate Highway 35 and other roadways. The Preferred Plant Site is already zoned for industrial use. The landscape is generally flat with few woods, allowing for a long line of sight from a distance. The facility should be visible from about a mile away, primarily from Interstate 35 and other surrounding roadways, nearby residences, and the adjacent farmland.^[41] The Preferred Plant Site would allow for the creation of a wetlands for tertiary treatment of process wastewater, which would decrease the impact of the facility in this configuration on water quality in the unnamed tributary. In addition, Faribault Energy Park plans to develop an interpretive park for public use surrounding this wetlands, which would greatly enhance the aesthetics of the facility. Because of topographic restrictions, the Alternative Plant Site would not allow this alternative. The Preferred Plant Site would be more favorable from the aesthetic standpoint.^[42]

40. The Faribault Municipal Airport is located approximately two miles southwest of the project site, and Federal Aviation Administration ("FAA") regulations governing air safety require certain tall structures to be marked with blinking lights or painted stripes to increase visibility to aircraft. The FAA will most likely require lighting for the 170 foot exhaust stack. If lighting is determined to be necessary, options include the installation of a dual lighting system that features a strobe beacon during daylight hours and blinking red light after nightfall. This type of system is more expensive than a continuous strobe system, the minimum required by the FAA; however, it will generate less of an impact on the few area residents that are expected to be able to see the tops of the exhaust stack.^[43]

41. Exterior lighting for the facility will be provided as required for security and safety throughout the station. Illumination levels will be in accordance with the Illuminating Engineering Society Handbook and code requirements. Faribault Energy Park would light the Plant Site in a manner similar to other industrial sites. Lighting may also increase at special times during construction or operation (for construction at night or during special plant maintenance). Faribault Energy Park would use outdoor light fixtures that shade the source of light, directing the light downward, so that it is unlikely that their lighting would light up the night sky or create a nuisance for nearby homeowners.^[44]

42. The visual impact of the proposed Plant will be reduced by a number of details, such as shrub and tree plantings, fences, paint colors, and lighting design.^[45]

43. Abandonment of the Plant may be regulated by the City of Faribault through the Conditional Use Permit process.^[46]

Noise

44. Stanley Consultants conducted an ambient noise survey at the project site to quantify and characterize the existing ambient sound levels. Background noise levels were determined at three locations: the far west property line along the transmission corridor, the center of the preferred property site, and the eastern property adjacent to the nearest receptor. Current ambient noise detectable on the project site consists of intermittent traffic along the local roads, traffic from Interstate Highway 35 and State Highway 76, operation of agricultural equipment, small aircraft, and birds and insects. Average background sound levels range from 54 to 59 decibels (“dBA”). The highest levels were recorded on the western boundary, adjacent to Interstate 35.^[47] The predicted sound levels of the operation of the project range from 62 to 65 dBA at the boundary of the developed portion of the site. The nearest residences are located approximately 800 feet to the east, approximately 2,000 feet to the north, and approximately 1,000 feet to the south of the proposed developed portion of the Preferred Plant Site. Sound levels from project operation at the nearest receptor are predicted to be 50 dBA.^[48]

45. The Preferred Plant Site would be located farther away from the potential receptors, resulting in significantly less noise impact than the Alternative Plant Site. Should the project be located on the Alternative Plant Site, noise mitigation options will be identified and utilized, if necessary, to reduce noise at the residence located to the north of the Alternative Plant Site. Appropriate noise monitoring and calculations (supported by engineering) will be made to demonstrate that noise levels from the proposed Plant will not exceed state or local noise tolerance levels.^[49] Minnesota Rules Part 7030.0040, subp. 2, outlines the standards followed for noise pollution control. The regulatory agency responsible for the formation and implementation of these standards is the MPCA. These standards, according to the definition of land use activities, demonstrate consistency with the requirements for annoyance, hearing, conversation, and sleep for all receptors within these areas classified as such.^[50]

46. Noise during facility construction would consist mostly of a series of intermittent sources. During operation, audible operational noise levels from the Plant should be maintained at a low level compared to the existing ambient levels so that the overall increase in noise is minimal. All construction activities will be conducted in accordance with applicable noise ordinances. Noise impacts from operation of the Plant are projected to be within MPCA noise standards.^[51]

Traffic Impact During Both Construction and Operation

47. During construction, the traffic increase on the local county and township roads will be intermittent and will vary with the phases of the construction activity. The number of construction workers expected may reach 250 during peak construction activity. Additional traffic due to the delivery of equipment and supplies will be expected. Local motorists will be temporarily inconvenienced by this increase in traffic activity. These roads could become damaged, but would be surfaced and maintained as necessary to provide suitable access to the generating facility. During operation, the facility will generate little additional traffic due to the small number of staff needed to operate the Plant. A maximum of 17 individuals will work at the facility during operation.^[52]

48. There is currently no direct access to either site. Both sites would require construction of city streets. Selection of the alternate site could require a railroad crossing from County Road 76.^[53]

49. Depending upon the facility's exact location, paving may be required of up to ½ mile of existing roadway or construction of a new plant entrance road. The Preferred Plant Site will require marginally more road construction for the actual construction phase of the project.^[54]

Community Benefits to be Expected from the Proposed Plant

50. A number of benefits to the immediate area and beyond have been identified, including temporary and permanent job creation and the addition of clean, efficient, and reliable generating capacity to the regional electric supply system.

51. A short-term positive economic benefit would result from the construction of this project. The project will generate construction-related employment and expenditures at nearby businesses. The City of Faribault may experience increased business activity during construction. A peak workforce of 250 persons is expected. Personal income impact estimates were developed by applying an average wage rate to the projected man-hours of employment. These estimates indicate the project will infuse an estimated total of \$13.5 million in payroll into the regional economy during the construction phase. After construction is over and the Plant is in operation, the economic benefit will continue to be positive with the addition of approximately 17 permanent, full-time positions. In addition, the project could attract additional industry to

the area, resulting in additional capital investment and consequent growth in employment. Personnel required for annual planned maintenance or major forced outage maintenance will be contracted for on a temporary basis directly from a maintenance outage contractor.^[55]

Cultural Values, Archaeological and Historic Resources

52. Construction of the facility has no potential to impact significant historical, cultural, or archaeological resources in potential project area. Several recorded archaeological sites were identified within a one mile radius of the project site. Review of the proposed Plant Sites by IMA Consulting, Inc., identified no properties listed on the National Register of Historic Places, and no known or suspected archaeological properties within the project area.^[56]

Recreation

53. Recreational areas in the Faribault area are remote from the project site and will not be impacted by this project.^[57]

Public Services

54. The project is not expected to adversely affect public services. The City of Faribault has not run a sanitary sewer to the property.^[58] The facility will not require potable water or sanitary treatment from nearby governmental authorities. The project will utilize fire and police services, anticipated to be provided by the City of Faribault. It is not anticipated that the generating facility will significantly affect the capabilities of the fire or police departments. The project is expected to positively impact electric reliability by providing additional generating capacity to the region.^[59]

Health and Safety

55. Construction and normal operation of the project is not expected to have any measurable adverse effect on the health of Plant construction workers, operating personnel, or residents of the surrounding area. Typical potential health concerns are related to worker accidents, worker and public exposure to noise, impacts from air emissions, electric and magnetic field exposure, and security issues.^[60]

56. The issue of electric and magnetic field ("EMF") exposure has been examined. According to a National Institute of Environmental Health and Sciences ("NIEHS") study released in May 1999, passive regulatory action is warranted such as a continued emphasis on educating both the public and the regulated community on means aimed at reducing exposures. The NIEHS does not believe that other cancers or non-cancer health outcomes provide sufficient evidence of a risk to currently warrant concern.^[61] This issue will be more closely examined in the separate proceeding to site the proposed HVTL, currently pending before the EQB.

Land-Based Economies, Including Agriculture, Forestry, Tourism and Mining

57. No significant effects on land-based economies are expected, although the project will remove no more than 37 acres of agricultural land from that use. The Preferred Plant Site area has already been zoned industrial, so at some point the farmland would undergo a transition to an industrial use. The adjacent Alternative Plant Site is zoned Transitional Urban Development. Therefore, there will be no long-term impact on the land use of the area. The construction of the Plant will have a temporary beneficial effect on economic activity due to the presence of the increased work force. Operation of the project will continue to benefit the economy with the addition of approximately 17 permanent full time positions. In addition, the project could attract additional industry to the area, resulting in additional capital investment and consequent growth in employment. Since both of the potential sites are currently used as farmland, the project does not have the potential to adversely affect mining, forestry, and tourism.^[62]

Effects of the Project on the Natural Environment

58. During construction, Best Management Practices (BMPs) will be used to prevent erosion. There will be no direct discharge of stormwater into the unnamed tributary at the Preferred Plant Site. The facility will be required to follow an MPCA issued storm water management plan that meets applicable standards. This stormwater management plan could include construction of a stormwater retention basin, or diversion of stormwater into created wetlands intended to be constructed for management of wastewater effluent (at the Preferred Plant Site). Discharge of stormwater at the site will be managed by an NPDES permit issued by the MPCA, and will be conducted in a manner consistent with federal, state and local requirements.^[63]

59. The loss of cultivated land will reduce food sources on the proposed Plant Sites and would displace limited amounts of wildlife that may inhabit these areas. However, an abundant amount of similar type habitat exists in surrounding areas, so it is not anticipated that the overall capacity for wildlife would be significantly impacted.^[64]

60. The proposed project site would be about 37 acres and the area to be cleared is anticipated to include approximately 15 acres. Construction activities like clearing, excavation, filling, and paving would remove vegetation. From a biological standpoint, the reduction in the number of plants will not have a significant environmental impact. Individual plants and animals and local populations of some species might be affected, but not the stability of any species as a whole in Minnesota.^[65]

Effect on Rare and Unique Natural Resources

61. Based on the review conducted by the United States Fish and Wildlife Services, the project is not expected to adversely affect any federally listed or proposed threatened or endangered species or adversely modify their critical habitat. No state or

federally-listed threatened or endangered species are located on the proposed sites. In addition, no habitat for such species was identified. ^[66]

Cumulative Present and Future Demands of the Project on Air and Water Resources

62. The Faribault area, which includes both Plant Sites, presently meets all federal and state ambient air quality standards and the Plant will be constructed and operated in accordance with all applicable air quality rules and regulations. Greenhouse gases (“GHG”) have risen in importance, the principal GHG being carbon dioxide. Particulate matter may be emitted into the air or be formed in the air from the chemical change of gases such as nitrogen oxides (“NOx”), sulfur oxide gases (“SOx”), volatile organic compounds (“VOC”) and ammonia. Air quality impacts have been shown to be below the Potential for Significant Deterioration (“PSD”) significance levels for all but five pertinent air pollutants: NOx, carbon monoxide (“CO”), particulate matter less than 10 microns in diameter (“PM10”), sulfur dioxide (“SO2”), and VOC. FEP has conducted a Best Available Control Technology (“BACT”) analysis for each of these five pollutants. The Plant’s potential emissions of other hazardous air pollutants have been estimated. ^[67]

63. The water use requiring the greatest consumptive demand – approximately 1350 gallons per minute maximum instantaneous demand - will be chilled water cooling for power generation purposes. The maximum water rate will occur only when the turbine is operating at maximum output in the combined cycle mode. A very small amount of water will be used for specialized uses in the generation process. Some water will be used in an evaporative cooling process. Sufficient reserve capacity will be maintained for fire protection purposes. ^[68]

Energy Efficiency

64. Combined cycle plants are based on the use of combustion turbine technology, where natural gas is burned in the combustion turbine and electricity is produced by a coupled generator. The waste heat created from this combustion process is recovered in a heat recovery steam/generator where high-pressure steam is produced and used to drive a steam turbine/generator to produce additional electrical power. Combined cycle technology is the coupling of two electric generation technologies, and boosts efficiency by using the same fuel to generate electricity twice. ^[69]

Adverse Human and Natural Environmental Effects Which Cannot be Avoided and Mitigation Strategies

65. *Noise.* Noise standards have been established by the Minnesota Pollution Control Agency. Noise impact during construction will be mitigated by limiting work to daytime hours, using properly muffled and maintained construction equipment, and controlling traffic to minimize noise on adjacent public roadways. During operation of the plant, low frequency noise and vibration from the turbine will be reduced to a very

low level through the direction of exhaust gases through the heat exchanger and heat recovery boiler in the combined cycle process. The project will incorporate attenuation design measures, as needed, to meet the appropriate and relevant noise regulations.^[70]

66. *Aesthetics.* FEP plans significant landscaping at either site and, if the Preferred Plant Site is selected, the creation of a wetlands and interpretive park. The character of the proposed structure does not lend itself to significant measures to alter its appearance. The visual impact of the Plant will be reduced by shrub and tree plantings, fences, paint colors, and lighting design.^[71]

67. *Soils.* Organic surface soils will be stripped and reserved for the creation of a wetland and for reuse at the site if possible. The potential project area is relatively flat with no steep slopes or highly erodible soils. Soil erosion during construction will be addressed by appropriate control measures in accordance with Best Management Practices. Following completion of construction, the entire area will be revegetated and maintained by the project owner.^[72]

68. *Groundwater.* All compounds that have the potential to contaminate the groundwater if accidentally released during construction and operation of the Plant will be stored and handled in a manner that complies with all applicable regulatory requirements and good environmental practice. All fuel oil storage will be subject to a Spill Prevention Control and Counter Measure Plan. During construction, equipment fuel will be stored onsite in bermed areas with appropriate spill protection. Project groundwater withdrawals will be made in compliance with a groundwater appropriation permit to be issued by the MDNR.^[73]

69. *Surface Water.* Stormwater discharges from either site will be managed through a retention pond, with overflow to the created wetland at the Preferred Plant Site. All discharges, including spent cooling water, will be managed through a NPDES permit issued by the MPCA. The permitting process will identify potential pollutant sources at the Plant, outline operating procedures for material handling activities, and describe controls and Best Management Practices to be implemented to minimize pollutants in stormwater runoff.^[74]

70. *Air.* Emissions of air pollutants will occur as a result of combustion of fuels from the Plant. The primary source of combustion-related emissions is the gas turbine. Secondary combustion sources include an auxiliary boiler, and emergency generator and a fire pump engine. The combustion turbine and the auxiliary boiler will be fueled by natural gas with a fuel-oil backup. It is estimated that the combustion turbine operating in combined cycle will fire natural gas for a maximum of 8000 hours per year and fuel oil for a maximum of 2500 hours per year. The emergency generator and fire pump engine will be fueled by fuel oil and will be limited to 500 hours of operation per year. The emergency generator will only be used to provide electricity at the facility should normal power be disrupted; it will not be used to produce electricity that will be sold. Other non-combustion emission sources include fuel-oil storage tanks, a cooling tower, and roadway related emissions.^[75]

71. Selection of natural gas as the primary fuel is the main mitigative measure for air emissions impact. BACT will be employed for each of the five pollutants that exceed the threshold for PSD under the federal Clean Air Act. Steam/water injection will be used when firing on fuel oil, reducing the flame temperature and thereby reducing NOx formation by introducing a heat sink into the flame zone. Selective catalytic reduction will also be used for mitigating NOx emissions from the turbine exhaust. Air emissions will be managed by an air permit issued by the MPCA, with continuous emissions monitoring to ensure compliance.^[76] Based on review of FEP's draft permit, the MPCA has stated that FEP will comply with applicable state and federal standards, rules and policies.^[77]

72. The release of fugitive dust during construction will be temporary and intermittent, and will be managed by altering construction practices or applying water or other dust control materials to dust sources. Following construction the site will be landscaped. Once the facility is operational, the primary dust source will be due to travel on any unpaved roads on site. The number of trips to the facility is expected to be small and main access roads to the site are expected to be paved, all of which will mitigate vehicle-generated dust.^[78]

73. There is no new technology that would minimize NOx that is technically feasible.^[79]

Future Need For Additional High Voltage Transmission Lines in the Faribault Area

74. It will be necessary for FEP to cooperate with MISO and NSP in the upgrade of the existing 115 kV Lake Marion - West Faribault transmission line. There are no identified future transmission projects that would benefit from the over-sizing of the 115 kV facilities associated with the FEP project. There would be no future benefit from increasing the capacity of the short outlet line to be constructed on FEP property.^[80]

Use Or Paralleling of Existing Rights-of-Way, Survey Lines, Natural Division Lines, and Agricultural Field Boundaries

75. There were no existing rights-of-way, natural division lines or field lines in the area that could have been used or paralleled for either the Preferred Plant Site or the Alternative Plant Site.^[81]

Use Of Existing Large Electric Generating Plant Sites

76. Neither FEP nor MMPA owns an existing large electric power generating Plant. The Preferred Plant Site was selected because it has immediate access to both a natural gas mainline and a high voltage transmission line, eliminating the need to acquire right-of-way for and the need to construct gas and electric transmission lines. There was no existing generating site available to the MMPA that met these criteria.^[82]

Use Of Existing Transportation, Pipeline, and Electric Transmission Systems Or Rights-of-Way

77. The applicant selected the Preferred Plant Site to make use of existing gas pipeline and electric transmission systems crossing the site. In addition, a railroad runs along the east side of the Alternative Plant Site and Interstate 35 runs along the west edge of the Preferred Plant Site. It will be necessary for the City of Faribault to complete an extension of an existing street to complete roadway access to the sites.^[83]

Electrical System Reliability

78. The project will be interconnected to the regional transmission system. Interconnection studies have been conducted by MISO as part of the interconnection process. The project will improve the reliability of the regional transmission system by reducing possible overloads of nearby regional transmission facilities that presently occur during high stress conditions and facility outages.^[84]

Prime Farmland and Irreversible And Irretrievable Commitments of Resources

79. The project results in an irreversible and irretrievable commitment for the foreseeable future of land from farmland to generation site. When the farmable land in the Faribault area is considered as a whole, the loss of farmland to this project is not great. The use of 37 acres of farmland by the proposed generating sites falls well within the allowable 125 acre limit of prime farmland use imposed by Minn. Rule 4400.3450, subp 4.^[85]

Prohibited and Excluded Sites

80. Minn. Rule 4400.3450, Subps. 1 and 3 and Minn. Rule 3350 list a number of sites where siting of a large electric power generating plant is prohibited or excluded. Neither proposed site is in a prohibited or excluded area.^[86]

Beneficial Uses of Waste Energy

81. The use of a waste heat recovery boiler in the combined cycle process uses the waste heat from the turbine to make steam to power a steam turbine and boosts the efficiency of the project from about 30 to 35 percent up to an expected 56 percent. In addition, FEP will be pursuing the possible sale of hot water from the combined-cycle process for use in a production process in the adjoining industrial park.^[87]

Differences Between The Preferred And Alternative Plant Sites

82. There are numerous differences between the two sites. First, as compared with the Preferred Plant Site, the Alternative Plant Site requires an additional

400 yards construction of new 115 kV line and a transmission line easement across the Preferred Plant Site.^[88]

83. Second, the Alternative Plant Site requires approximately a quarter mile longer natural gas pipeline interconnection from the existing NNG mainline than the interconnection for the Preferred Plant Site and a pipeline easement across the Preferred Plant Site.^[89]

84. Third, there is insufficient space at the Alternative Plant Site for the construction of a wetlands to contain the wastewater discharge. On the Preferred Plant Site, wastewater will be discharged into a created wetlands, while at the Alternative Plant Site, the wastewater will be treated and then released into the unnamed tributary running across the site. At either site the discharges will be made under a NPDES permit issued by the MPCA.^[90]

85. Fourth, the preferred site will likely require extension of an existing street. The alternate site would likely require development of an improved road, with railroad crossing.^[91]

86. Fifth, the Preferred Plant Site allows for the construction of an interpretive park, allowing the citizens of the area additional recreational opportunities, making it a more positive alternative.^[92]

87. Sixth, the closest residence is closer in proximity to the Alternative Plant Site. Should the Alternative Plant Site be selected, it is likely that the resident would desire his property to be purchased, resulting in the displacement of one family unit. Because of the likely objection of this resident property owner, the Preferred Plant Site enjoys more community acceptance than the Alternative Plant Site.^[93]

88. Seventh, the Preferred Plant Site may allow development that is more practical and consistent with the City of Faribault master plan. Construction on the Alternative Plant Site would require the acquisition of easements across the Preferred Plant Site, which would result in making the Preferred Plant Site less appealing for development. In addition, construction on the Alternative Plant Site would make access to the Preferred Plant Site more difficult, providing another barrier to future development.^[94]

89. Eighth, the Preferred Plant Site is farther West of the prevailing downwind impacted area, State Highway 76, giving it a clear advantage from the standpoint of fogging and icing potential.^[95]

90. There is very little difference in visual impact between the Preferred and Alternative Plant Sites. However, the Preferred site allows for construction of a created wetland and interpretive park.^[96]

91. Those items for which the costs differ between the two sites include the length of gas line interconnect, the length of transmission line interconnect, the length of the road that would be required to be constructed, and the cost of easements for the pipeline and transmission line (which would only be required if the Alternative Plant Site were chosen). The difference in the currently estimated costs between the two sites for construction of the additional gas line and transmission line, not including the cost of easements, is approximately \$1,225,000 less for the preferred site.^[97]

92. No problems concerning approval of the site permit were raised by other state or federal agencies or local entities.

Based on the foregoing Findings of Fact, the Administrative Law Judge makes the following:

CONCLUSIONS

1. Any of the foregoing Findings more properly designated as Conclusions are hereby adopted as such.

2. The Administrative Law Judge and the Minnesota Environmental Quality Board have jurisdiction over the subject matter of the hearing pursuant to Minn. Stat. §§ 14.50 and 116C.06.

3. The Applicant has the burden of demonstrating compliance with the requirements for a site permit by a preponderance of the evidence.^[98] FEP has complied with the procedural requirements prerequisite to issuing a site permit to the Applicant.

4. The MEQB staff has completed an Environmental Impact Statement, as required by Minn. Stat. § 116C.57, subd. 2c.^[99] A public hearing was held pursuant to published notice, as required by Minn. Stat. § 116C.57, subd. 2d.^[100]

5. Both of the sites proposed by the Applicant for the construction of a large electrical power generating plant are acceptable sites under the provisions of Minn. Stat. § 116C.57, subd. 4, and Minn. Rules Chapter 4400. The Applicant's Preferred Plant Site is preferable to the Alternative Plant Site.

Based upon the foregoing Conclusions of Law, the Administrative Law Judge makes the following:

RECOMMENDATION

That the MEQB issue a Site Permit to Faribault Energy Park, LLC, for construction of the proposed 250 megawatt dual fuel combined cycle combustion turbine generating plant on the proposed site in the SW ¼ of the NE ¼ of Section 13, Township 110N, Range 21W, Rice County, Minnesota, and subject to such conditions as the MEQB determines are reasonable and appropriate.

Dated this 29th day of April, 2004

S/ Beverly Jones Heydinger

BEVERLY JONES HEYDINGER
Administrative Law Judge

Tape Recorded: One Tape

NOTICE

Under Minn. Stat. § 14.62, subd. 1, the agency is required to serve its final decision upon each party and the Administrative Law Judge by first class mail or as otherwise provided by law.

[1] Following the close of the record, the Administrative Law Judge requested that the parties identify portions of the record that supported a few of the proposed findings. The parties responded by April 27, 2004, and their responses have been added to the record.

[2] Ex. 6.

[3] Ex. 6.

[4] Ex. 7.

[5] Exs. 8-10, 16.

[6] Ex. 13.

[7] Ex. 24.

[8] Ex. 30.

[9] Ex. 39.

[10] Ex. 28.

[11] Ex. 32.

[12] Ex. 1.

[13] Exs. 25, 33, 29.

[14] Ex. 12.

[15] Ex. 44; Minn. R. 1405.1900.

[16] Ex. 6 at 2-1; Ex. 36 at 1.

[17] Ex. 36 at 1.

[18] Ex. 36 at 3 through 4.

[19] Ex. 36 at 2, 8, 9; Ex. 6 at 2-7.

[20] Ex. 36 at 2; Ex. 6 at 1-1. Following the close of the record, the Administrative Law Judge was notified that construction may be done in two parts, with operation of the gas turbine to begin in 2005 and the combined cycle operation to begin in 2006. Although this is not reflected in the record, the parties are apparently willing to stipulate to this change. See letter from Alan Mitchell, April 27, 2004.

- [\[21\]](#) Ex. 43.
- [\[22\]](#) Ex. 43, Fig. 1; Ex. 6 at § 2, Fig. 1.
- [\[23\]](#) Ex. 43, Fig. 2.
- [\[24\]](#) Ex. 43 at 4-1; Ex. 6 at 2-13; Ex. 36 at 5 through 6.
- [\[25\]](#) Ex. 36 at 8 through 12.
- [\[26\]](#) Ex. 36 at 2 through 4.
- [\[27\]](#) Ex. 36 at 9; Ex. 43 at 4-5.
- [\[28\]](#) Ex. 36 at 3, 10; Ex. 35 at 37.
- [\[29\]](#) Ex. 6, § 2, Figs. 3 and 4; Ex. 36 at 9.
- [\[30\]](#) Ex. 36 at 8 through 9.
- [\[31\]](#) Per Mr. Larson and Mr. Mitchell on April 12, 2004.
- [\[32\]](#) Ex. 35 at 44; Ex. 6, Appendix A, Table A-14.
- [\[33\]](#) Ex. 35 at 44; Ex. 36 at 3.
- [\[34\]](#) Ex. 43 at 6-4; Letter to Bill Storm from Rebecca Wooden, Mar. 30, 2004; response from FEP to Bill Storm, Apr. 7, 2004; EQB Response to Comments on the Draft Environmental Impact Statement, Apr. 12, 2004.
- [\[35\]](#) Ex. 35 at 43, 47 through 48; Ex. 43 at 5-2 and 6-4.
- [\[36\]](#) Ex. 35 at 43; Ex. 43 at 5-2.
- [\[37\]](#) Ex. 6 at 2-5.
- [\[38\]](#) Ex. 35 at 41, 45 through 46; Ex. 43 at 3-4, 5-2.
- [\[39\]](#) Ex. 35 at 3 through 4; Ex. 6 at 3-2; Ex. 43 at 5-1.
- [\[40\]](#) Ex. 35 at 52 through 53.
- [\[41\]](#) Ex. 35 at 8; Ex. 43 at 5-17 and 6-15, 6-16.
- [\[42\]](#) Ex. 6 at 2-5.
- [\[43\]](#) Ex. 43 at 6-13 and 6-16; Ex. 35 at 10.
- [\[44\]](#) Ex. 43 at 6-16; Ex. 35 at 9-10.
- [\[45\]](#) Ex. 35 at 9.
- [\[46\]](#) Faribault Code of Ordinances, Appendix B, Chapter 2, Article 7.
- [\[47\]](#) Ex. 43 at 5-4; Ex. 35 at 6.
- [\[48\]](#) Ex. 43 at 6-5 through 6-6.
- [\[49\]](#) Ex. 6 at 2-3 and 3-2; Ex. 35 at 4 through 8.
- [\[50\]](#) Ex. 43 at 6-6; Ex. 35 at 6.
- [\[51\]](#) Ex. 6 at 3-2 through 3-4; Ex. 35 at 7 through 8.
- [\[52\]](#) Ex. 6 at 3-10; Ex. 43 at 6-12; Ex. 35 at 18.
- [\[53\]](#) Ex. 43 at 3-2 through 3-3.
- [\[54\]](#) Ex. 35 at 14; Ex. 43 at 3-2.
- [\[55\]](#) Ex. 43 at 6-13 through 6-14; Ex. 35 at 16.
- [\[56\]](#) Ex. 6 at Appendix B, p. 5.
- [\[57\]](#) Ex. 6 at 3-7; Ex. 35 at 13.
- [\[58\]](#) See Comments to Draft EIS by Department of Natural Resources, Mar. 30, 2004, and Response of FEP, Apr. 7, 2004, Ex. 43.
- [\[59\]](#) Ex. 6 at 2-3 and 3-8; Ex. 35 at 13; Ex. 36 at 9; Ex. 43 at 3-2 and 6-15.
- [\[60\]](#) Ex. 6 at 3-5; Ex. 35 at 10.
- [\[61\]](#) Ex. 6 at 3-6; Ex. 35 at 11-12.
- [\[62\]](#) Ex. 6 at 3-10; Ex. 35 at 15 through 18, 19 through 20, 56.
- [\[63\]](#) Ex. 35 at 22, 40 through 41.
- [\[64\]](#) Ex. 35 at 49 through 50; Ex. 43 at 6-11, 12.
- [\[65\]](#) Ex. 35 at 49 through 50; Ex. 44 at 6-11.
- [\[66\]](#) Ex. 43 at 5-13, 6-12, Appendix C; Ex. 35 at 51 through 52.
- [\[67\]](#) Ex. 35 at 11 and 23 through 24; Ex. 43 at 5-5, 5-8 through 5-10 and Table 11.
- [\[68\]](#) Ex. 35 at 44; Ex. 43 at 4-2, 3.
- [\[69\]](#) Ex. 6 at 2-9, 10; Ex. 43 at ES-1.
- [\[70\]](#) Ex. 6 at 6-3; Ex. 35 at 53; Ex. 43 at 6-5, 6, Table 7.
- [\[71\]](#) Ex. 6 at 6-4, Fig. 6; Ex. 35 at 9, 54; Ex. 43 at 3-4.
- [\[72\]](#) Ex. 6 at 4-5, 5-2 and 5-14; Ex. 35 at 22, 54.
- [\[73\]](#) Ex. 6 at 6-4; Ex. 35 at 54, 55; Ex. 43 at 4-5, 6.

- [\[74\]](#) Ex. 6 at 5-14; Ex. 35 at 55.
- [\[75\]](#) Ex. 6 at 5-3; Ex. 35 at 55; Ex. 43 at 6-8.
- [\[76\]](#) Ex. 6 at 5-3 and 6-5; Ex. 35 at 55; Ex. 43 at 4-4 and 6-10.
- [\[77\]](#) Ex. 42.
- [\[78\]](#) Ex. 6 at 6-5; Ex. 35 at 55, 56; Ex. 43 at 6-11.
- [\[79\]](#) Ex. 35 at 31.
- [\[80\]](#) Ex. 36 at 12.
- [\[81\]](#) Ex. 36 at 10.
- [\[82\]](#) Ex. 36 at 11.
- [\[83\]](#) Ex. 36 at 11.
- [\[84\]](#) Ex. 36 at 11, 12.
- [\[85\]](#) Ex. 35 at 17, 56.
- [\[86\]](#) Ex. 43 at 5-13.
- [\[87\]](#) Ex. 36 at 12.
- [\[88\]](#) Ex. 6 at 2-4; Ex. 43 at 3-3.
- [\[89\]](#) Ex. 6 at 2-4; Ex. 43 at 3-3.
- [\[90\]](#) Ex. 6 at 5-2; Ex. 43 at 3-4.
- [\[91\]](#) Ex. 43 at 3-3.
- [\[92\]](#) Ex. 6 at ii.
- [\[93\]](#) Ex. 6 at ii; Ex. 43 at 3-4.
- [\[94\]](#) Ex. 6 at ii; Ex. 43 at 3-4.
- [\[95\]](#) Ex. 6 at iii; Ex. 43 at 3-3.
- [\[96\]](#) Ex. 43 at 3-3.
- [\[97\]](#) Ex. 36 at 9, 10.
- [\[98\]](#) Minn. R. 1405.1700, subp. 7.
- [\[99\]](#) Ex. 43.
- [\[100\]](#) Exs. 30 and 39.